

## ABSTRACT OF THE DISCLOSURE

A radiation image detecting system includes a solid radiation detector. The solid radiation detector is formed by a conversion layer which converts radiations bearing thereon image information to electric charges, and a two-dimensional image reader which detects the electric charges obtained by the conversion and is formed by a two-dimensional array of a plurality of solid radiation detecting elements. A high frequency component attenuation phosphor layer attenuates high frequency components of the electric charges bearing thereon high frequency components of the image information not lower than a Nyquist frequency, which is defined by the pitches of the array of the solid radiation detecting elements, so that aliasing noise due to the high frequency components of the image information not lower than the Nyquist frequency becomes not stronger than 30% of intrinsic noise power at a frequency equal to a half of the Nyquist frequency.